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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,938	04/01/2004	Ronald R. Davids		2937

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EXAMINER

VAN, QUANG T

ART UNIT PAPER NUMBER

3742

DATE MAILED: 10/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/708,938

Applicant(s)

DAVIDS ET AL.

Examiner

Quang T. Van

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2 and 4-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-9 is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Objections***

1. Claims 1-2 and 4-5 are objected to because of the following informalities: "the workpiece" recited in claim 1, line 3, has no antecedent basis and it should be changed to "a workpiece". Correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Marando et al (US 6,477,774). Marando discloses an apparatus and method for initially performing a heat treatment process comprising the steps of loading the workpiece (col. 5, lines 26-28); moving the workpiece (25) linearly to a predetermined location (col. 5, lines 39-41); **stopping the linear movement of the workpiece at predetermined location (col. 5, lines 59-62)**; returning the workpiece to its original location; and unloading the workpiece (col. 6, lines 24-27); and further comprising selecting between one of the following sub-processes and implementing the selected sub-process:

1) constantly rotating the workpiece when the workpiece is moving linearly or is at the said predetermined location;

2) when the workpiece is at the predetermined location, holding the workpiece in a fixed position for a predetermined period of time **(it is inherently performing this step while performing the above stopping step)**; and

3) when the workpiece is at the predetermined location, holding the workpiece in a fixed position for a predetermined period of time, then, prior to the returning step,

- a) lowering the workpiece a predetermined distance;
- b) indexing the workpiece a predetermined distance;
- c) raising the workpiece back into the predetermined location;
- d) holding the workpiece in a fixed position for a predetermined amount of

time; and

- e) repeating the lowering, indexing, raising and holding steps.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Chaterlain (US 2,376,476). Chaterlain discloses an automatic screw machine comprising the steps of loading the workpiece (page 4, col. 1, lines 64-66); moving the workpiece linearly to a predetermined location (page 4, col. 2, lines 1-4); **stopping the linear movement of the workpiece at predetermined location (page 4, col. 2, lines 5-9)**; returning the workpiece to its original location (page 4, col. 2, lines 9-13); and it is inherent unloading the workpiece in order to load the new workpiece; and further comprising selecting between one of the following sub-processes and implementing the selected sub-process:

1) constantly rotating the workpiece when the workpiece is moving linearly or is at the said predetermined location;

2) when the workpiece is at the predetermined location, holding the workpiece in a fixed position for a predetermined period of time (**it is inherently performing this step while performing the above stopping step**); and

3) when the workpiece is at the predetermined location, holding the workpiece in a fixed position for a predetermined period of time, then, prior to the returning step,

a) lowering the workpiece a predetermined distance;

b) indexing the workpiece a predetermined distance;

c) raising the workpiece back into the predetermined location;

d) holding the workpiece in a fixed position for a predetermined amount of time; and

e) repeating the lowering, indexing, raising and holding steps.

5. Claims 1-2 and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Bishop (US 5,433,800) cited by applicant. Bishop discloses a scanning induction hardening comprising the steps of loading the workpiece (col. 4, lines 63-66); moving the workpiece linearly to a predetermined location (col. 3, lines 12-14); **stopping the linear movement of the workpiece at predetermined location (col. 3, lines 14)**; returning the workpiece to its original location (col. 5, lines 1-13); and unloading the workpiece (col. 5, lines 14-16); and further comprising selecting between one of the following sub-processes and implementing the selected sub-process:

1) constantly rotating the workpiece when the workpiece is moving linearly or is at the said predetermined location;

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2) when the workpiece is at the predetermined location, holding the workpiece in a fixed position for a predetermined period of time **(it is inherently performing this step while performing the above stopping step)**; and

3) when the workpiece is at the predetermined location, holding the workpiece in a fixed position for a predetermined period of time, then, prior to the returning step,

a) lowering the workpiece a predetermined distance;

b) indexing the workpiece a predetermined distance;

c) raising the workpiece back into the predetermined location;

d) holding the workpiece in a fixed position for a predetermined amount of time; and

e) repeating the lowering, indexing, raising and holding steps.

6. Claims 6-9 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not show or suggest an actuator consisting of a ball screw/ball spline assembly with servo motors and a lift shaft for providing the linear and rotational movement of the workpiece; a means for moving the lift shaft without undue bending or flexing, and a means for holding the workpiece in position on the lift shaft as recited in claims 6-9.

NOTE: Since claim 6 uses means plus function format, it gives rise to the interpretation under 35 USC 112, par. 6 in light of and consistent with the written description of the invention in the application.

***Response to Amendment***

8. Applicant's arguments with respect to claims 1-2 and 4-9 have been considered but are moot in view of the new ground(s) of rejection.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quang T. Van whose telephone number is 571-272-4789. The examiner can normally be reached on 8:00Am 7:00Pm M-Th.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



QV  
October 27, 2005



Quang T Van  
Primary Examiner  
Art Unit 3742